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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,744	05/18/2006	Daria Onichtchouk	2923-753	9418
6449 7590 06/27/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER DANG, IAN D				
ART UNIT 1647		PAPER NUMBER		
NOTIFICATION DATE 06/27/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

# Office Action Summary

**Application No.**

10/579,744

**Applicant(s)**

ONICHTCHOUK, DARIA

**Examiner**

IAN DANG

**Art Unit**

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1-8, claim(s) 1-2, 9-10, 14-21, drawn to a pharmaceutical composition comprising a SF1-SF8 protein and/or functional fragment.

Group 9-16, claim(s) 1-8, 11-21, drawn to a pharmaceutical composition comprising a SF1-SF8 nucleic acid molecule encoding a SF-1-SF8 protein.

Group 23-30, claim(s) 1-2, 9-10, 14-21, drawn to a pharmaceutical composition comprising an effector/modulator of an SF1-SF8 protein.

Group 31-38, claim(s) 1-8, 11-21 drawn to a pharmaceutical composition comprising an effector/modulator to an SF-1-SF8 nucleic acid.

Group 39-46, claim(s) 22-23, drawn to the use of a SF1-SF8 nucleic acid molecule for the manufacture of a medicament.

Group 47-54, claim(s) 22-23, drawn to the use of a SF1-SF8 polypeptide encoded thereby or a fragment or a variant for the manufacture of a medicament.

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Group 55-62, claim(s) 22-23, drawn to the use of an effector/modulator of a SF1-SF8 nucleic acid for the manufacture of a medicament.

Group 63-70, claim(s) 22-23, drawn to the use of an effector/modulator of a SF1-SF8 polypeptide for the manufacture of a medicament.

Group 71-78, claim(s) 24, drawn to the use of a SF1-SF8 nucleic acid molecule for identifying substances capable of interacting with a SF1-SF8 polypeptide.

Group 79-86, claim(s) 24, use of a SF1-SF8 polypeptide encoded thereby or a fragment or a variant for identifying substances capable of interacting with a SF1-SF8 polypeptide.

Group 87-94, claim(s) 24, drawn to the use of an effector/modulator of a SF1-SF8 nucleic acid for identifying substances capable of interacting with a SF1-SF8 polypeptide.

Group 95-102, claim(s) 24, drawn to drawn to the use of an effector/modulator of a SF1-SF8 polypeptide for identifying substances capable of interacting with a SF1-SF8 polypeptide.

Group 103-110, claim(s) 25-26, drawn to a non-human transgenic animal exhibiting an increased expression of a SF1-SF8 polypeptide.

Group 111-118, claim(s) 25-26, drawn to a non-human transgenic animal exhibiting a reduced expression of a SF1-SF8 polypeptide.

Group 119-126, claim(s) 27-28, drawn to a recombinant host cell exhibiting a modified expression of a SF1-SF8 polypeptide.

Group 127-133, claim(s) 27-28, drawn to a recombinant host cell which comprises a SF1-SF8 nucleic acid molecule.

Group 134-141, claim(s) 29, drawn to a method of identifying a polypeptide involved in the regulation of energy homeostasis and/or metabolism in a mammal comprising the steps of a SF1-SF8 polypeptide.

Group 142-149, claim(s) 30, drawn to a method of screening for an agent which effects/modulates the interaction or a SF1-SF8 polypeptide with a binding target.

Group 150-157, claim(s) 31, drawn to a method of screening for an agent which effects/modulates the interaction or a SF1-SF8 polypeptide.

Group 158-165, claim(s) 32-33, drawn to a method of producing a composition comprising mixing a polypeptide that is involved with the regulation of energy homeostasis and/or metabolism in a mammal comprising contacting a SF1-SF8 polypeptide.

Group 166-173, claim(s) 34 and 39, drawn to the use of a polypeptide as identified by the method of identifying a polypeptide involved in the regulation of energy homeostasis and/or metabolism in a mammal comprising the steps of contacting a polypeptide SF1-SF8.

Group 174-181, claim(s) 35, drawn to the use of a nucleic acid molecule comprising a SF1-SF8 nucleic acid molecule for the preparation of a medicament.

Group 182-189, claim(s) 36, drawn to the use of a polypeptide comprising a SF1-SF8 polypeptides for the preparation of a medicament.

Group 190-197, claim(s) 37, drawn to the use of a vector comprising a SF1-SF8 nucleic acid for the preparation of a medicament.

Group 198-205, claim(s) 38, drawn to the use of a host cell exhibiting a modified expression of a SF1-SF8 polypeptide for the preparation of a medicament.

Group 206-213, claim(s) 38, drawn to the use of a recombinant host cell which comprises a nucleic acid molecule encoding a SF1-SF8 protein.

Group 214-221, claim(s) 38, drawn to the use of a recombinant host cell which comprises a nucleic acid molecule encoding a SF1-SF8 protein.

Group 206-213, claim(s) 40, drawn to the use of a SF1-SF8 nucleic acid molecule or a fragment for the production of a non-human transgenic animal that overexpresses the SF1-F8 gene product.

Group 214-221, claim(s) 40, drawn to the use of a SF1-SF8 nucleic acid molecule or a fragment for the production of a non-human transgenic animal that underexpresses the SF1-F8 gene product.

Group 222-229, claim(s) 41, drawn to a kit the comprising one SF1-SF8 nucleic acid molecule.

Group 230-237, claim(s) 41, drawn to a kit the comprising one SF1-SF8 polypeptide molecule.

Group 238-245, claim(s) 42, drawn to a method of producing a composition mixing the agent identified by the method of screening for an agent which effects/modulates the interaction or a SF1-SF8 polypeptide with a binding target.

Group 246-253, claim(s) 43, drawn to the use of an agent identified by the method of screening for an agent which effects/modulates the interaction of a SF1-SF8 polypeptide with a binding target.

The inventions listed as Groups 1-253 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

According to PCT Rule 13.2, unity of invention exists only when the shared same or corresponding technical feature is a contribution over the prior art. The inventions listed as Groups 1-253 do not relate to a single general inventive concept because they lack the same or corresponding technical feature.

Claim 1 is directed to a pharmaceutical composition comprising a SF1-SF8 protein or a functional fragment thereof. Li et al teach a SF1 protein expressed in human liver non-tumor tissue that inherently meets the limitations of a pharmaceutical composition (see AAK14915 submitted December 8, 1999). The prior art meets the limitations disclosed in claim 1. Thus Group I lacks novelty or inventive step and does not make a contribution over the prior art. Since the first claimed invention has no special technical feature, it cannot share a special technical feature with the other claimed invention.

Under PCR Rule 13.1, the application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species of nucleic acids or polypeptides are as follows:

- a) SF1
- b) SF2
- c) SF3
- d) SF4
- e) SF5
- f) SF6
- g) SF7
- h) SF8

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner: 1, 3, 22, 24, 25, 27, 29, 30, 31, 40, 41.



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The following claim(s) are generic: claims 1, 3, 22, 24, 25, 27, 29, 30, 31, 40, 41.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the nucleic acids or proteins listed in claims 1, 3, 22, 24, 25, 27, 29, 30, 31, 40, 41 do not share a common nucleic acid sequence or amino acid sequence.

### **Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN DANG whose telephone number is (571)272-5014. The examiner can normally be reached on Monday-Friday from 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ian Dang

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Patent Examiner

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June 11, 2008

/David S Romeo/

Primary Examiner, Art Unit 1647